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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/518,699	01/06/2006	Rolf Pfeifer	3926.124	5649
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EXAMINER				
LE, HOA T				
ART UNIT		PAPER NUMBER		
1794				
MAIL DATE		DELIVERY MODE		
04/03/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/518,699

Applicant(s)

PFEIFER ET AL.

Examiner

H. (Holly) T. Le

Art Unit

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) 7-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/ISD)
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date Aug. 2006

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of claims 1-6 in the reply filed on December 12, 2008 is acknowledged. The traversal is on the ground(s) that there is a unity of the inventions because they are linked by an inventive feature: the relationship in softening point of the coating and the core materials. This is not found persuasive because such feature is known in the art as illustrated in the prior-art rejections discussed in this office action.
2. The requirement is still deemed proper and is therefore made FINAL. Accordingly, claims 7-15 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claims 2-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 2, "preferably" renders the claim indefinite because it is not clear whether the "thermoplastic polymer" is a required feature of the claimed invention. In addition, the claim recites a broad recitation "polymer", and the claim also recites "thermoplastic

polymer" which is the narrower statement of the range/limitation. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949).

Claims 3 and 4 suffer the same deficiency of claim 1.

Claim 5 is indefinite because the "one element" as defined is unclear. "Element" by default means element(s) in the periodic table, and the "element" is defined in the claim as selected from a group of materials consisting of metal, ceramic, and polymer. Thus, it is unclear whether the element means the "element" present in the metal, ceramic or polymer materials or "element" means a material being metal, ceramic or polymer. In addition, the Markush phrase is improper. the last two members of the Markush group must be linked by the word "and".

Claim 6 is deemed indefinite in view of its dependency upon claim 5.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Graham et al (US 4,732,920).

Claims 1-4: Graham teaches a coated particle comprising a core and a coating, wherein the coating comprising polyvinyl butyral. See claims 1, 6 and 7. The core contains minerals and ceramics (claim 14), and ceramic/mineral naturally has a higher softening point than that of a polymer (polyvinyl butyral). The coated particles appear to be suitable in selective laser sintering. Note that the phrase "for use in selective laser sintering" is an intended use which is not considered a claim limitation unless Applicant can prove that the coated particle taught by Graham cannot be used in such process.

Claims 2-4: Polyvinyl butyral is a thermoplastic material, inherently possesses a softening point of below 70°C, and is hydrophobic.

Claim 5: The core is made of ceramic (Graham, claim 14).

Claim 6: The core is a plurality of particulate materials (i.e. "centers") which have been first coated with a coupling agent. See claim 1. Therefore the materials of the core is loosely joined as a result of the effect of the coupling agent.

7. Claims 1-2 and 5 are rejected under 35 U.S.C. 102(e) as being anticipated by McCrary (US 7,270,879).

Claims 1-2: McCrary teaches a coated particle comprising a core and a coating, wherein the coating comprising a thermoplastic material having a softening point of 40 to 80°C. See McCrary, claims 1 and 4. The core is made of sand or ceramic (McCrary, column 4, lines 48-50). Sand or ceramic naturally has a higher softening point than that of a thermoplastic polymer. The coated particles appear to be suitable in selective laser sintering. Note that the phrase "for use in selective laser sintering" is an intended use which is not considered a claim limitation unless Applicant can prove that the coated particle taught by Graham cannot be used in such process.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to H. (Holly) T. Le whose telephone number is 571-272-1511. The examiner can normally be reached on 12:30 a.m. to 9:00 p.m. (EST), Mondays to Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/H. (Holly) T. Le/
Primary Examiner, Art Unit 1794

March 29, 2009